

were searched for dietary intervention trials published between Jan 2004 – March 2015 using the following keywords and combinations: “trial” OR “intervention”, “food” OR “diet”, “weight loss” and “compliance” OR “adherence”. Studies were included if food was provided to at least one study arm, and if weight change and compliance were reported. The final included studies were categorised into two groups: trials involving a control group not supplemented with food (‘food versus no food’), and trials providing food to all participants (‘food versus food’).

**Results:** Seventeen articles from 16 studies were included. Weight loss was reported for all participants in ‘food versus food’ category. In ‘food versus no food’ category, the intervention groups appeared to lose more weight than controls. Three trials reported a significant difference in weight loss between groups.

**Conclusions:** In dietary intervention trials, food supplementation alone does not lead to greater weight loss but may act as an incentive to modulate diet and improve compliance.

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#### COMPARISON OF FRUIT AND VEGETABLE INTAKES DURING WEIGHT LOSS IN MALES AND FEMALES

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**Background/Aims:** Direct comparison of fruit and vegetables intakes by sex during weight loss is lacking. The aim was to identify differences between males and females in fruit and vegetable intakes and plasma carotenoid concentrations during weight loss and to examine relationships between change in fruit and vegetable intakes and change in weight in both males and females.

**Methods:** Men and women ( $n = 100$ ; BMI 25–40 kg/m<sup>2</sup>) aged 18 to 60 years were included. Fruit and vegetable intakes were assessed using the validated Australian Eating Survey food frequency questionnaire. Fasting blood was collected to assess plasma carotenoids as biomarkers of fruit and vegetable intakes, which were determined by HPLC.

**Results:** Changes in fruit and vegetable intake were influenced by baseline intakes, with significant differences in change between the highest and lowest baseline intake quartiles for males and females. Those within the highest baseline intake quartile reduced total fruit and vegetables by approximately 200 g/day, while those in the lowest quartile increased intakes by 75 g/day. Associations between fruit and vegetable intakes and

plasma carotenoid concentrations were stronger at baseline in males than females (total carotenoids: males  $r = 0.342$ ; females  $r = 0.035$ ), but similar when considering change in fruit and vegetable intake and plasma concentrations (total carotenoids males  $r = 0.173$ ; females  $r = 0.188$ ). Fruit and vegetable intakes during weight loss predicted total weight loss for males, but not females ( $p < 0.001$ ).

**Conclusions:** Baseline intakes have more influence than sex differences on change in fruit and vegetable intakes during weight loss attempts.

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#### IMPROVING SHOPPING AND BUDGETING BEHAVIOURS IN PEOPLE WITH DEPRESSION

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**Background/Aims:** Individuals with depression are more likely to consume poor diets and are at increased risk of CVD and diabetes. As grocery shopping can consume a substantial part of a family’s budget it is important to improve shopping and budgeting knowledge of people with depression to encourage a higher intake of healthier food to improve their mental and physical health. This study tests the efficacy of fortnightly education sessions designed to improve shopping and budgeting knowledge in people with depression.

**Method:** Adults aged 18–65 years with depression received four shopping and budgeting education sessions. Knowledge about shopping and budgeting was evaluated using a 27-item purpose-designed questionnaire before and after the education sessions. A 0–10 point agreement scale (with don’t know) assessed agreement with statements relating to shopping and budgeting knowledge. Responses were analysed using a paired samples *t*-test comparing changes between the intervention ( $n = 41$ ) and control group ( $n = 30$ ).

**Results:** Overall improvements in mean knowledge scores were observed for 22 of the 27 statements. Significant improvements were observed in knowledge relating to supermarkets not being the cheapest place to buy fruit and vegetables ( $p = 0.04$ ), and monitoring weekly shopping bills when on a budget ( $p = 0.05$ ). Trends towards significance were identified for awareness of unit pricing on supermarket price tags ( $p = 0.06$ ) and use of ‘natural’ on packaging not indicating that the product is natural ( $p = 0.07$ ).

**Conclusions:** Shopping and budgeting education sessions can improve shopping and budgeting knowledge in people with depression, which may assist with healthier dietary choices.

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